

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 99-017-B)

PATENT

OP 1645 ✓
Box Sequence

In re Application of:

Ades, et al.

Serial No.: 09/600,057

Filed: October 5, 2000

For: Recombinant Lipidated PsaA Protein,
Methods of Preparation and Use

Group Art Unit: 1645

Examiner: R. P. Swartz

Confirmation No.: 7894

RECEIVED

AUG 06 2002

TECH CENTER 1600/2900

TRANSMITTAL LETTER

BOX SEQUENCE
U.S. Patent and Trademark Office
P. O. Box 2327
Arlington, VA 22202

Dear Sir:

In regard to the above identified application,

1. We are transmitting herewith the attached:

- a) photocopy of Notice to Comply;
- b) Submission of Sequence Listing;
- c) Sequence Listing in paper and disk forms; and
- d) return receipt postcard.

2. With respect to fees:

- a) No fee is required.
- b) Please charge any underpayment or credit any overpayment our Deposit Account, No. 13-2490.

3. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, Washington, D.C. 20231 on July 26, 2002.

DISK TO STIC

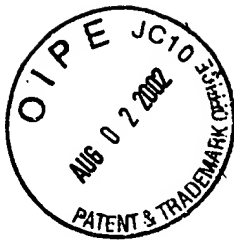
DATE: _____



Respectfully submitted,

Michael S. Greenfield
Registration No. 37,142

Date: July 26, 2002



RECEIVED

AUG 06 2002

TECH CENTER 1600/2900

Application No. 09/600,057

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CAR §1.821 - §1.825 for the following reasons(s):

- ☐ 1. This application clearly fails to comply with the requirements of 37 CAR §1.821 - §1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990, and at 55 FR 18230, May 1, 1990.
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 CAR §1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CAR §1.821(e).
- ☐ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CAR §1.822 and/or §1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing".
- ☒ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CAR §1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CAR §1.821(e).
- ☐ 7. Other: _____

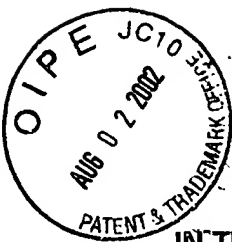
APPLICANT MUST PROVIDE:

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as were as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 CAR §1.821(e) or §1.821(f) or §1.821(g) or §1.825(b) or §1.825(d).

FOR QUESTIONS REGARDING COMPLIANCE WITH THESE REQUIREMENTS, PLEASE CONTACT:

For Rules Interpretation, call (703) 308-1123
For CRF Submission help, call (703)308-4212
For Patent Software help, call (703) 557-0400

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR RESPONSE.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 99,017-B)

In the Application of:

Ades et al.

Serial No.: 09/600,057

Filing Date: July 10, 2000

For: Recombinant Lipidated PsaA Protein,
Methods of Preparation and Use

Examiner: Not yet assigned

Group Art Unit: Not yet assigned

11/B
JM
8/7/02

SUBMISSION OF SEQUENCE LISTING

RECEIVED

AUG 06 2002

TECH CENTER 1600/2900

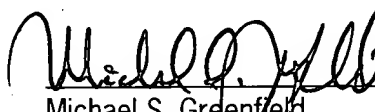
BOX SEQUENCE
U.S. Patent and Trademark Office
P. O. Box 2327
Arlington, VA 22202

Dear Sir:

In accordance with 37 C.F.R. 1.821-1.825, enclosed is a copy of the Sequence Listing in paper and computer readable format. Both forms are the same and neither contains new subject matter.

Respectfully submitted,

Date: July 26, 2002


Michael S. Greenfield
Registration No. 37,142

Telephone: 312-913-0001
Facsimile: 312-913-0002

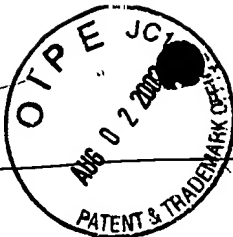
McDonnell Boehnen Hulbert & Berghoff
300 South Wacker Drive, 32nd Floor
Chicago, IL 60606

CERTIFICATE OF MAILING (37 C.F.R. 1.8a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Sequence, U.S. Patent and Trademark Office, P. O. Box 2327, Arlington, VA 22202, on July 26, 2002.

Date: July 26, 2002


Michael S. Greenfield



99017-B.ST25.txt
SEQUENCE LISTING

RECEIVED

AUG 06 2002

TECH CENTER 1600/2900

<110> Ades, Edwin
Carlone, George
De, Barun
Sampson, Jacquelyn
Huebner, Robert

<120> Recombinant Lipidated PsaA Protein, Methods of
Preparation and Use

<130> 99,107-B

<140> 09/600,057

<141> 2000-07-10

<150> PCT/US99/00379

<151> 1999-01-14

<150> US 09/017,782

<151> 1998-02-03

<160> 3

<170> PatentIn Ver. 2.0

B¹
<210> 1

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Primer DE09
covering 26 base pairs at the 5' end of the psaA
gene, ending at the SphI site.

<400> 1

gggcatgctg tagcggaaaa aaagat

26

<210> 2

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Primer DE11
covers 26 base pairs at the 3' end of the PsaA
coding sequence and a BamHI site.

<400> 2

ggggatcctt attttgccaa tccttc

26

<210> 3

<211> 921

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Recombinant

lipidated PsaA - first 52 residues driven from
OspA signal sequence of *B. burdorferi*, remaining
from *S. pneumoniae* type 6B PsaA.

<400> 3

```

atgaaaaaat atttattggg aataggtcta atattagcct taatagcatg cgctagcgga 60
aaaaaagata caacttctgg tcaaaaacta aaagttgttg ctacaaactc aatcatcgct 120
gatattacta aaaatattgc tggtgacaaa attgaccttc atagtatcgt tccgattggg 180
caagacccac acgaatacga accacttcct gaagacgtta agaaaacttc tgaggctgat 240
ttgattttct ataacggtat caaccttgaa acaggtggca atgcttggtt tacaaaattg 300
gtagaaaatg ccaagaaaac tgaaaaacaaa gactacttcg cagtcagcga cggcgttgat 360
gttatctacc ttgaagggtca aaatgaaaaa ggaaaagaag acccacacgc ttggcttaac 420
cttgaaaacg gtattatfff tgctaaaaat atcgccaaac aattgagcgc caaagaccct 480
aacaataaag aattctatga aaaaaatctc aaagaatata ctgataagtt agacaaactt 540
gataaagaaa gtaaggataa atttaataag atccctgctg aaaagaaact cattgtaacc 600
agcgaaggag cattcaaata cttctctaaa gcctatgggtg tcccaagtgc ctacatctgg 660
gaaatcaata ctgaagaaga aggaactcct gaacaaatca agaccttggg tgaaaaactt 720
cgccaaacaa aagttccatc actctttgta gaatcaagtg tggatgaccg tccaatgaaa 780
actgtttctc aagacacaaa catcccaatc tacgcacaaa tctttactga ctctatcgca 840
gaacaaggta aagaaggcga cagctactac agcatgatga aatacaacct tgacaagatt 900
gctgaaggat tggcaaaaata a                                     921

```